

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

STEWART, Michael B.
RADER, FISHMAN & GRAUER PLLC
39533 Woodward Avenue
Suite 140
Bloomfield Hills, MI 48304
ETATS-UNIS D'AMERIQUE

PCT

WRITTEN OPINION
(PCT Rule 66)

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(day/month/year)

04.06.2004

Applicant's or agent's file reference
65823-0515

REPLY DUE

within 3 month(s)
from the above date of mailing

International application No.
PCT/US 03/28040

International filing date (day/month/year)
08.09.2003

Priority date (day/month/year)
24.09.2002

International Patent Classification (IPC) or both national classification and IPC
H01B7/02, H01B7/02

Applicant
KRONE, INC. et al.

1. This written opinion is the **first** drawn up by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application
3. The applicant is hereby **invited to reply** to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 24.01.2005

Name and mailing address of the international preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Weisser, W

Formalities officer (incl. extension of time limits)

Commare, I

Telephone No. +49 89 2399-2883



I. Basis of the opinion

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"*):

Description, Pages

1-16 as originally filed

Claims, Numbers

1-11 as originally filed

12-30 received on 12.11.2003 with letter of 04.11.2003

Drawings, Sheets

1-4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

6. Additional observations, if necessary:

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V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	Not new: 1,2,4-12,14,18,23,24,26-29; New: 3,13,15,16,19,25,30
Inventive step (IS)	Claims	Not inventive: 1,2,4-12,14,15,18,23,24,26-29; Inventive: 3,13,16,19,25,30
Industrial applicability (IA)	Claims	Industrially applicable: 1-30

2. Citations and explanations**see separate sheet**

1. In this communication the following document will be referred to:
D1: US 504 397 A (J. W. MARSH) 5 September 1893 (1893-09-05)
2. The subject matter defined in claim 4 is already defined in claim 1. Claim 4 should thus be deleted.

In present claims 1, 24, 25 and 26 the term "extending generally along" is not clear, since the expression "generally" leaves the scope of said term unclear.

In claim 8 it is unclear how the closed-cell gas pockets should be related with the wire and whether closed-cell gas pockets should be present.

Present claims 17 and 20-22 merely define desired results to be achieved without in clear terms setting out the means necessary for obtaining these results (Guidelines C-III, 4.7). In order to meet Art.6 PCT the applicant is therefore requested to amend said claims adding the essential features of the wire which are necessary to obtain said results.

In present claim 24 the meaning of "extends generally the length of the conductor" is not clear. It appears (cf. present claims 1, 25, 26 and Figs) that the at least one first channel should extend along the length of the conductor.

In present claim 25 the term "twisted pairs" is not clear. It should be clarified that the term relates to wires (i.e. twisted pairs of wires) (cf. e.g. paragr. 0025).

In present claim 26 it should be clarified whether the term "including" (in the first line of the claim) should refer to "wire" or to "component". In the following it is considered, that reference is made to "component", since in the 4. line of the claim a "channelled component" is defined.

In order to meet the requirements of Art. 6 PCT the applicant is asked to clarify these points in any new claims to be filed.

3. D1 (cf. Figs.1,2,4,9; page 1, left-hand column, line 33- right-hand column, line 71) discloses a wire comprising a conductor (a), an insulation (b), surrounding the conductor, and air channels (2) extending along the longitudinal axis of the conductor, wherein the outer peripheral surface of the conductor forms one side of the channels.

The subject matter of present claims 1, 24 and 26 is therefore not new (Art. 33.2 PCT).

3.1 The subject matter of dependent present claims 2, 4-12, 14, 18, 23, 27-29 is also not new with regard to D1, for the following reasons:

- Claims 2, 4-12, 18, 23: apparent from the above citations (section 3)
- Claims 14: outer jacket (c)
- Claims 27-29: the channelled insulation (b) is a "jacket"

3.2 It is well known in the art that single wires may be twisted for various reasons. It is thus obvious to the skilled person that also single wires of the type disclosed in D1 may be twisted. The subject matter of present claim 15 therefore appears not to be inventive (Art.33.3 PCT).

4. No objections under Art. 33 PCT are made with respect to present claims 3, 13, 16, 19, 25 and 30.

5. The applicant is requested to file new application documents taking into account the above objections. The applicant is asked to show where a basis for the amendments can be found in the original application documents (Art. 34.2b PCT). He is further requested to indicate in the letter of reply the difference of the subject matter of the new claims vis-à-vis the state of the art and the significance thereof.

In case that more than one independent claims (see present claims 1, 24, 25 and 26) are filed, the applicant is asked to show that the requirements of Rule 13.1 PCT are met.

The independent claim should follow the two-part form, delimited with respect to the closest prior art (D1) (Rule 6.3b,ii PCT). Reference signs in parentheses should be inserted in the claims to increase their intelligibility (Rule 6.2b PCT).

The description must be brought into conformity with any new claims to be filed. In order to meet the requirements of Rule 5.1a,ii PCT the most relevant document(s) (D1) should be identified in the description.

The unit(s) "in" expressed on pages 10 and 14 should be replaced by appropriate SI units (Rule 10a PCT). The present expression(s) should, however, be retained in parentheses after the replacement expression(s).

The wordings "the entire teaching of these applications being incorporated herein by this reference" (paragr. 0001) and the entire paragr. 0071, which imply that the extent of protection may be expanded in some vague and not precisely defined way, should be deleted (Guidelines Chapter III, 4.3a).

**WRITTEN OPINION
SEPARATE SHEET**

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